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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,908	07/12/2002	Makoto Yoneya	220523US0PCT	2995
22850	7590	08/02/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			NGUYEN, HOAN C	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	

2871

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# **Advisory Action** **Before the Filing of an Appeal Brief**

Application No.

10/070,908

Applicant(s)

YONEYA ET AL.

Examiner

HOAN C. NGUYEN

Art Unit

2871

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 12 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## **NOTICE OF APPEAL**

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

## **AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

## **AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

## **REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

**ROBERT H. KIM**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**

Continuation of 11, does NOT place the application in condition for allowance because:

***Response to Arguments***

Applicant's arguments filed on 12 July 2005 have been fully considered but they are not persuasive.

Applicant's arguments are follows:

A. Kim does not disclose a liquid crystal device having a plurality of anchoring directions wherein each of the alignment layers has a pretilt angle of substantially zero.

B. Kim discloses that small pretilt angles are disfavored:

However, the photo-alignment method has problems that the process is complicated due to the double exposure and the pretilt angle is too small, for example, the obtained pretilt angles being approximately 0.15°, 0.26° and 0.30° respectively when the oblique irradiation angles are 30°, 45° and 60°. In addition, it takes long time to irradiate light into the alignment layer so total tact time is prolonged, as well, the alignment stability of photo-alignment method is weaker than that of rubbing method.

Examiner's responses to Applicants' arguments are follows:

A. Kim discloses a liquid crystal device having a plurality of anchoring directions wherein each of the alignment layers has a pretilt angle of substantially zero as Fig. 14 shown.

Furthermore, with the photo-alignment method, the light that illuminates on two-dimension surface will inherently generate the multi anchoring directions.

B. Kim discloses (col. 2 lines 45-57):

The pretilt angle and pretilt angle direction are obtained by controlling the second oblique direction relative to the substrate coated with the alignment layer.

Kim discloses the photo-alignment method, which obtains too small pretilt angle when the oblique irradiation angles are 30°, 45° and 60° since pretilt angle and pretilt angle direction are obtained by controlling the second oblique direction relative to the substrate coated with the alignment layer. The oblique-irradiation-angle dependence can be problems that can be overcome by (col. 3 lines 7-12)

The first alignment layer comprises polyimide, but the second alignment layer comprises photopolymers, the photo-polymers including polysiloxane based materials. The pretilt angle of this invention is controlled depending upon the photo-energy of the ultraviolet light irradiating.

The pretilt angle of this invention is controlled depending upon the photo-energy (not oblique direction) of the ultraviolet light irradiating as Fig. 4 shown. Furthermore, Kim's invention with photo-energy controlled the pretilt angle, which includes substantially zero degree with photo-energy greater than 6000mJ/cm<sup>2</sup>.